

In the claims:

Please amend the claims as follows:

Claim 1 (Currently Amended) A method for constructing and caching a chain of file identifiers in a computing system environment that represent the chain of file identifiers representing a full path to a file system resource the method comprising the steps of:

processing a file system resource's defined name (DN) into a file identifier (FID) and defined name database;

retrieving from the defined name database a first file identifier for a first file system resource, the retrieved file first identifier corresponding to a first defined name of the first file system resource;

adding the retrieved first file identifier to a chain of file identifiers, the added file identifier being the first file identifier in the chain;

retrieving a second file identifier for a second file system resource in a full path of the first file system resource;

adding the second retrieved file identifier to the chain; and

repeating said step of retrieving a next file identifier for a next file system resource and said step of adding the next retrieved file identifier to the chain until a file identifier for each file system resource in a full path of the first file system resource is retrieved and added in the chain; and

storing the constructed chain of file identifiers in a cache storage location.

~~retrieving a file identifier corresponding to the file system resource which is the target of the access attempt and a file identifier chain for the directory of the target system resource;~~

~~searching for the effective security classification category and defined name for the target resource file identifier;~~

~~updating the security classification system, when said search finds a security classification category for the target resource file identifier;~~

~~determining whether operations for the target file system resource could affect the file system name space; and~~

~~terminating said method when operation does not affect the file system name space.~~

Claim 2 (Canceled)

Claim 3 (Canceled)

Claims 4 (Canceled)

Claims 5 (Canceled)

Claim 6 (Canceled)

Claim 7 (Canceled)

Claim 8 (Canceled)

Claim 9 (Canceled)

Claim 10 (Canceled)

Claim 11 (Canceled)

Claim 12 (Canceled)

Claim 13 (Canceled)

Claim 14 (Currently amended) A computer program product in a computer readable medium for use in constructing and caching a chain of file identifiers in a computing system environment, the chain of file identifiers representing that represent a full path to a file system resource comprising:

instructions for processing a file system resource's defined name (DN) into a file identifier (FID) and defined name database;

instructions for retrieving from the defined name database a first file identifier for a first file system resource, the retrieved first file identifier corresponding to a defined name of the first file system resource;

instructions for adding the retrieved first file identifier to a chain of file identifiers, the added first file identifier being the first file identifier in the chain;

instructions for retrieving a second file identifier for a second file system resource in a full path of the first file system resource;

instructions for adding the second retrieved file identifier to the chain;

instructions for repeating said instructions for retrieving a next file identifier for a next file system resource and said instructions for adding the next retrieved file identifier to the chain until a file identifier for each file system resource in a full path of the first file system resource is retrieved and added in the chain; and

instructions for storing the constructed chain of file identifiers in a cache storage location.

~~instructions for retrieving a file identifier corresponding to the file system resource which is the target of the access attempt and a file identifier chain for the directory of the target system resource;~~

~~instructions for searching for the effective security classification category and defined name for the target resource file identifier;~~

~~instructions for updating the security classification system, when said search finds a security classification category for the target resource file identifier;~~

~~instructions for determining whether operations for the target file system resource could affect the file system name space; and~~

~~instructions for terminating said method when operation does not affect the file system name space.~~

Claim 15 (Canceled)

Claim 16 (Canceled)

Claim 17 (Canceled)

Claim 18 (Canceled)

Claim 19 (Canceled)

Claim 20 (Canceled)

Claim 21 (Canceled)

Claim 22 (Canceled)

Claim 23 (Canceled)

Claim 24 (Canceled)

Claim 25 (Canceled)

Claim 26 (Canceled)

Claim 27 (Original). A computer connectable to a distributed computing system, which includes file system objects containing information accessed during the execution of application and system programs comprising:

- a processor; a native operating system; application programs;
- an external authorization program overlaying said native operating system and augmenting standard security controls of said native operating system;
- a cache storage location for store file identifier chains which represent paths to system resources, said cache providing for faster searches of file identifiers; and
- an access decision component within said external authorization program for determining access to protected file system objects.

Claim 28 (Original) The method as described in claim 1 wherein said method is implemented through the use of externally stored attributes, said attributes being security rules for system resources and further comprising the step of attaching security rules of a directory to all files in said directory.